

# Barometer of mobile Internet connections in Venezuela.

01/01/2023 - 31/12/2023













4 Methodology nPerf Network assesment

## 1. Introducing nPerf



## **Expert in the telecom network optimization**

nPerf is an independent French company based in Lyon (France). For over a decade, nPerf has been a trusted partner for both fixed and mobile operators, providing comprehensive network testing solutions and analysis. Our mission is to accurately measure, evaluate, and enhance the understanding of Internet connectivity around the world.







## **Test your Internet connection with nPerf!**

nPerf allows you to test the quality of your fixed, mobile, or Wi-Fi Internet connections up to 10 Gb/s! Dowload our app or visit our website!







# 2. Executive Summary



The subscribers of Digitel enjoyed the best mobile Internet performances in Venezuela during 2023.

	Digitel	Movilnet	Movistar Movil
▶ Download bitrates (Mb/s)	9.08	4.60	6.42
Upload bitrates (Mb/s)	4.63	1.90	3.66
Latency (ms)	105.71	121.69	106.98
Web browsing (%)	42.94	34.51	38.41
Youtube streaming (%)	62.83	49.66	61.61
nPerf Score (nPoints)	29 242	15 788	24 040





# 3. Analysis



In the competitive arena of Venezuela's mobile market, Digitel, Movilnet, and Movistar Movil are vying for dominance, each showcasing distinct strengths and areas ripe for improvement. Their performance is evaluated based on download and upload speeds, latency, as well as browsing and streaming scores, alongside overall nPerf scores.

#### Digitel: the uncontested leader

Digitel clearly emerges as the market leader, outperforming its competitors across several Key Performance Indicators. With a download speed of 9 Mb/s and an upload speed of 5 Mb/s, Digitel offers the fastest mobile internet experience in the Venezuelan market. Although its latency stands at 106 ms, which leaves room for improvement, Digitel makes up for it with impressive browsing and streaming scores of 43% and 63%, respectively. These scores, coupled with a notable nPerf score of 29,242 nPoints, firmly position Digitel at the forefront of mobile internet services in Venezuela.

#### Movistar Movil: a formidable contender

Movistar Movil, while trailing behind Digitel, showcases commendable performance with a download speed of 6 Mb/s and

an upload speed of 4 Mb/s. Its latency, closely mirroring Digitel's, does not significantly impact the user experience, as evidenced by solid browsing and streaming scores of 38% and 62%. With an nPerf score of 24,040 nPoints, Movistar Movil establishes itself as a strong competitor, offering a well-rounded service in terms of speed, reliability, and content delivery.

#### Movilnet: potential for growth

Movilnet displays the most modest performance among the trio, with download and upload speeds of 5 Mb/s and 2 Mb/s, respectively. The ISP faces challenges with a higher latency of 122 ms, which is further reflected in its lower browsing and streaming scores of 35% and 50%. These figures, combined with an nPerf score of 15,788 nPoints, highlight significant areas for improvement.

# 4. Methodology



nPerf provides a **free tool to assess Internet connection quality** via its website and mobile apps (Android, iOS). Daily, thousands of people rely on nPerf for speed tests in their country, contributing to a comprehensive crowdsourced database covering all operators.

The study employs a strong filtering method to reflect real customer experiences on a specific network (mobile or fixed line). Measures are taken to prevent probes and measurement robots from affecting the results.

For mobile connections, we assess:

#### **Download bitrate:**

Indicates the amount of data your connection can receive in one second from the nPerf server. The highest the measured value, the best is the bitrate of your connection.

#### Upload bitrate:

Indicates the amount of data your connection can send in one second from the nPerf server. The highest the measured value, the best is the bitrate of your connection.

#### **♦** Latency (ping):

It indicated the delay a small packet of data requires to make a round-trip from your computer to the nPerf server. The shorter the delay, the most reactive your connection is. The main is the minimum value.

## Browsing performance:

The browsing test assesses the load time of the fully loaded pages, including images, javascript, CSS, and fonts, for the five most popular sites. This indicator reflects the user's perceived quality of the Internet network.

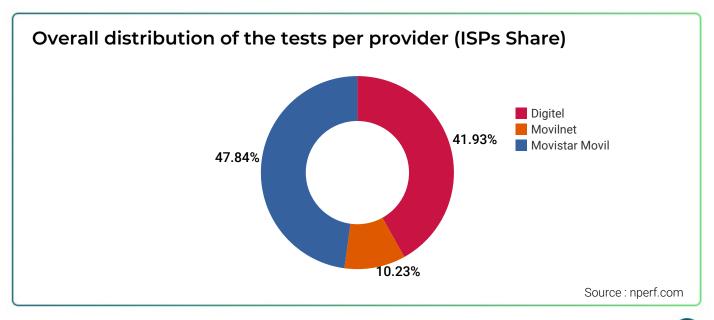
#### **Streaming performance:**

The video streaming test gauges the load time of a fully loaded video in three resolutions on YouTube, considering stalls during playback. This indicator reflects the user's perceived quality of the Internet network.

Statistical precision is crucial in accurately determining winners. At nPerf, we prioritize test quality, precise reporting, and transparency. Analyzing a large volume of tests in this study, we've achieved 3 % precision for absolute values and 1 point for percentage-based results, highlighting the reliability and accuracy of our data.

For a more comprehensive understanding of the user experience, our report features test results during both Busy hours (6 PM to 11 PM) and Idle hours (the rest of the day). Busy hours, marked by network strain, can impact user experience through congestion. This approach helps in understanding how network performance fluctuates throughout the day.

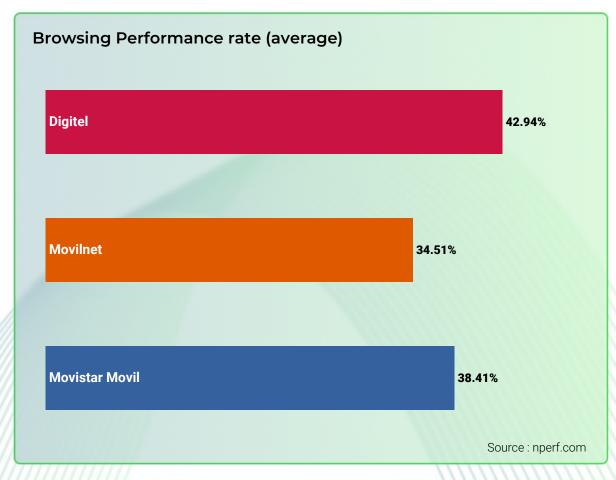
We only include national Internet service providers with test share above 5% share. The chart below shows the overall test distribution for each service provider.



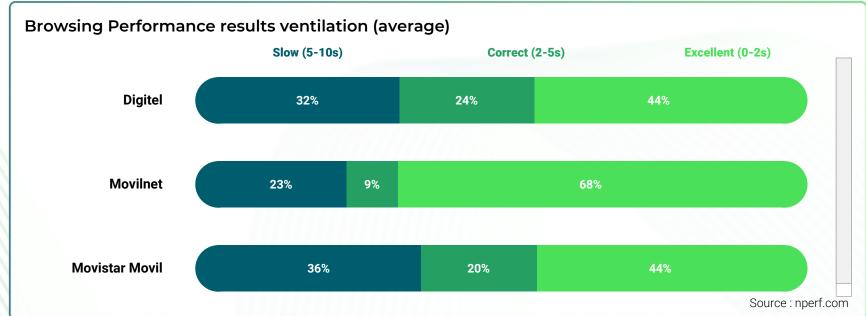


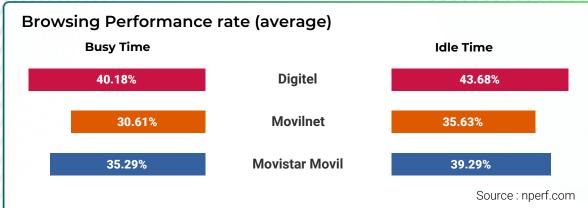
# **Quality of Experience: Browsing**

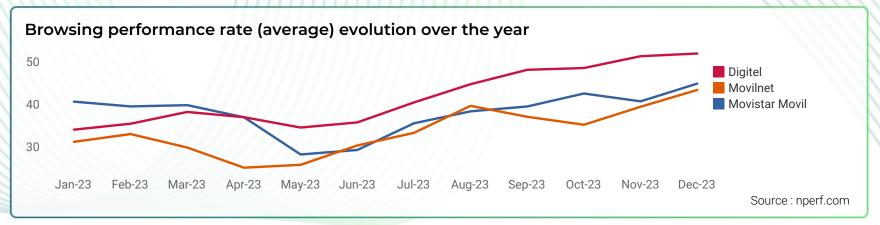




The subscribers of Digitel enjoyed the best mobile Internet browsing performance in 2023.



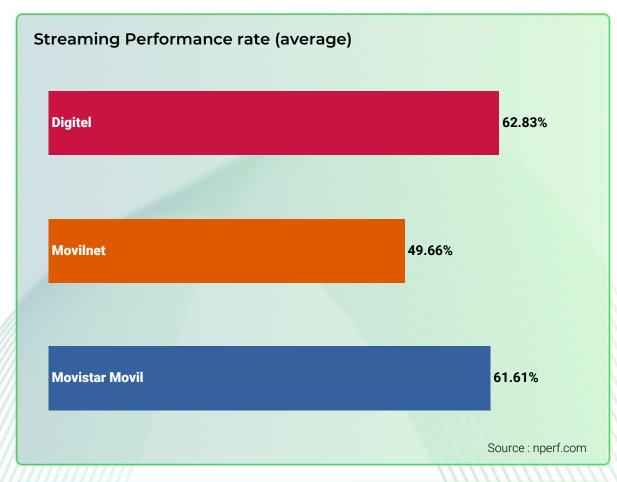




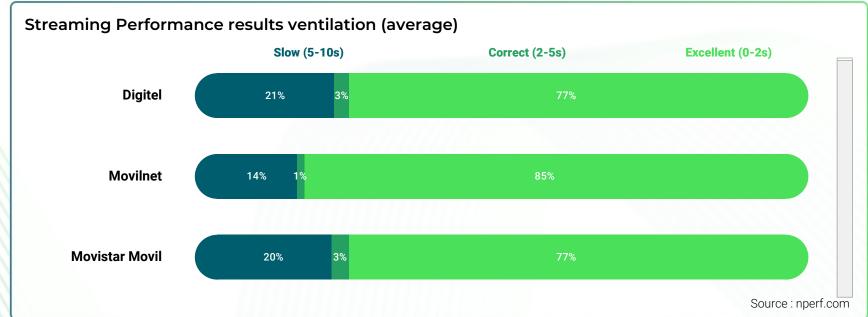


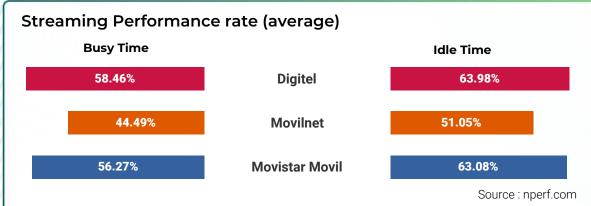
# **Quality of Experience: Streaming**

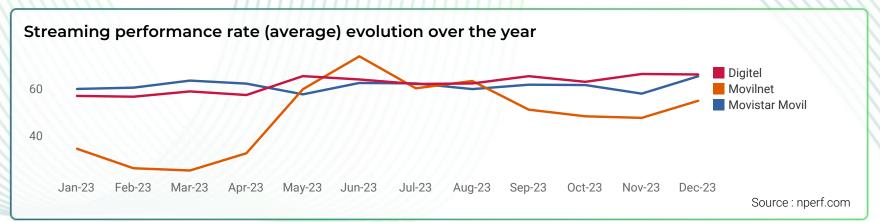




The subscribers of Digitel enjoyed the best mobile Internet streaming perforance in 2023.



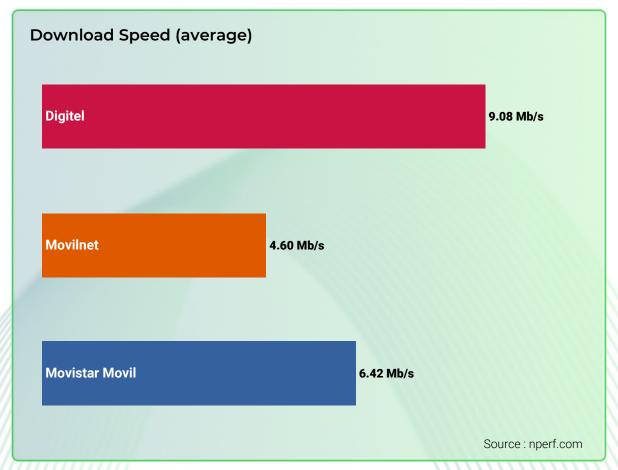




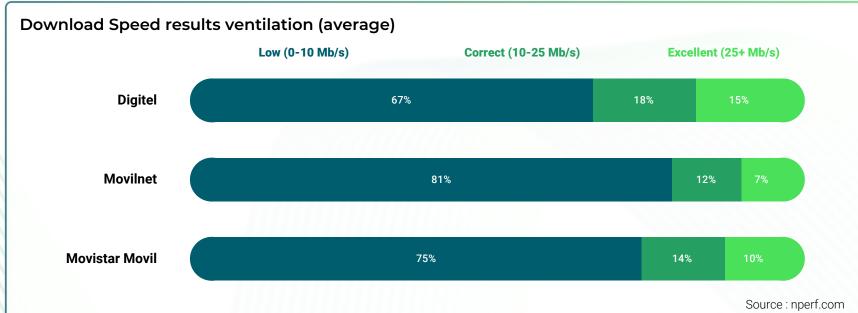


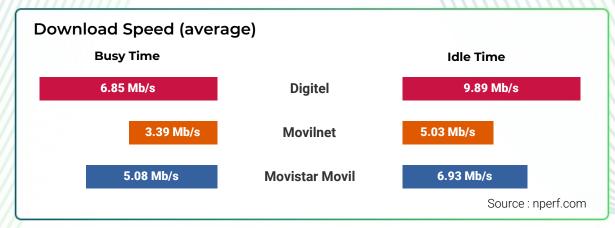
# Speed: Download

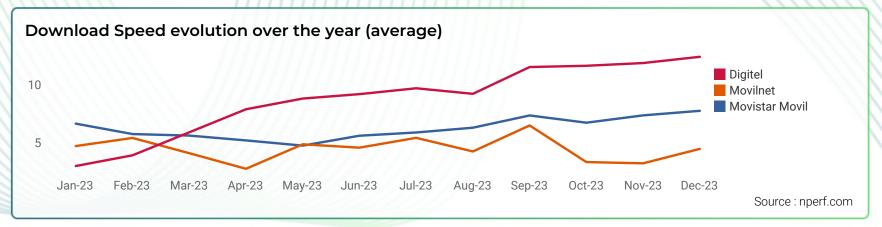




The subscribers of Digitel enjoyed the best average mobile Internet download speed in 2023.



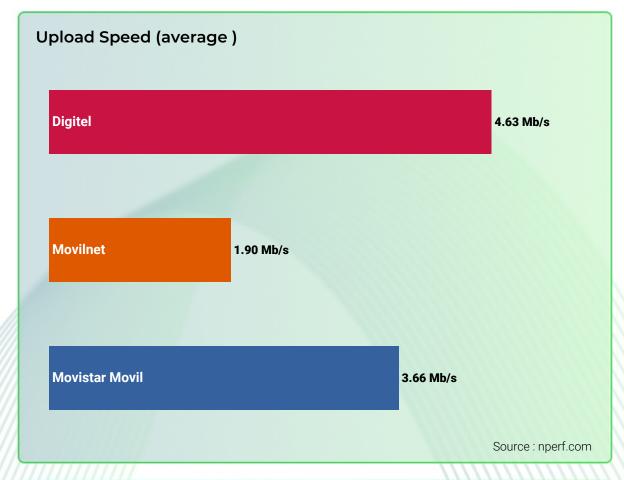






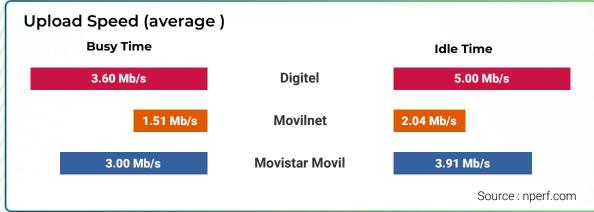
# Speed: Upload

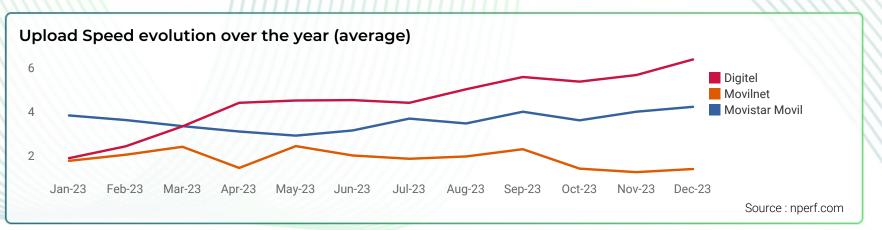




The subscribers of Digitel enjoyed the best average mobile Internet upload speed in 2023.



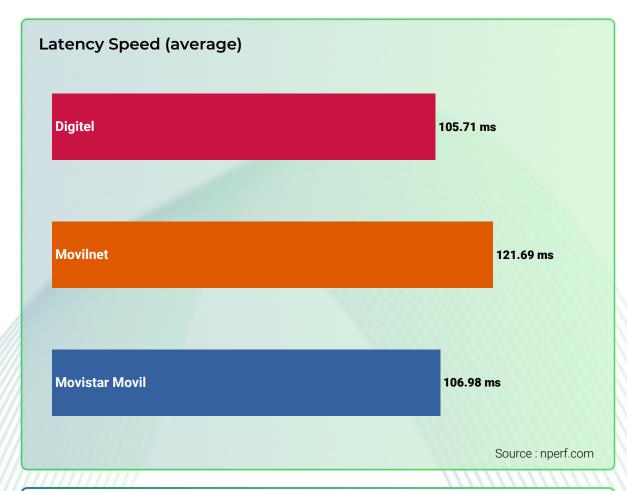




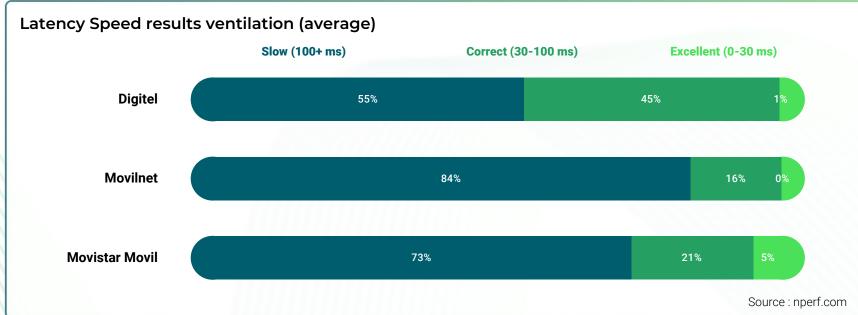


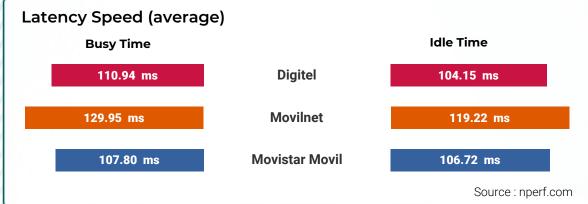
# Speed: Latency

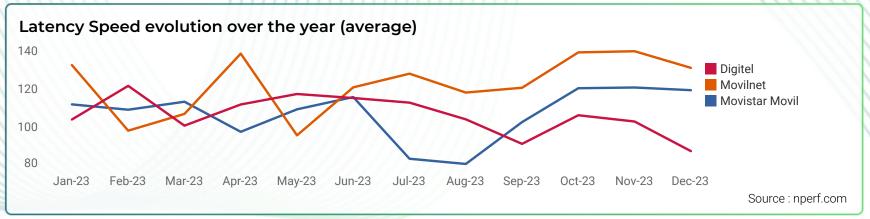




The subscribers of Digitel and Movistar Movil enjoyed the best average mobile Internet latency speed in 2023.

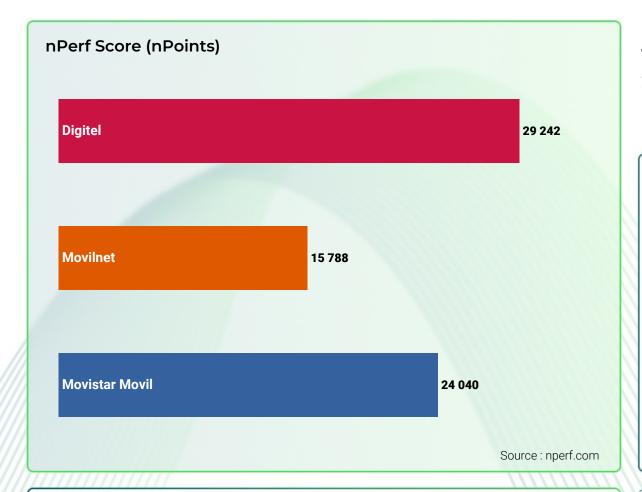






# Mobile Internet performance in Venezuela





The subscribers of Digitel enjoyed the best mobile Internet performances in Venezuela during 2023.

The nperf score takes into account the measured bitrates, the latency and the Qoe tests. The value of the points for the rates and the latency is calculated on a logarithmic scale, to better represent the perception of the user.

Thus, this score reflects the overall quality of the connection experienced by the user.

Source: nperf.com

